

ABSTRACT

The present invention discloses a composite voice service terminal apparatus which includes a variety of voice call service functions to enable a user or subscriber to selectively use the services on his/her call purpose, and a method for using the same. The composite voice service terminal apparatus includes a Subscriber Line Interface Circuit/Subscriber Line Audio processing Circuit (SLIC/SLAC), a voice digital signal processor (DSP), a processor, an asymmetric digital subscriber line digital signal processor (ADSL DSP), an asymmetric digital subscriber line analog front end (ADSL AFE), a multiplexer (MUX) for outputting data to one of the channels from the digital tone generating unit and the voice digital signal processor, a digital tone generating unit for including sources of a dial tone, a ring back tone, a busy tone, and guide tones of voice over Internet protocol (VoIP), voice over digital subscriber line (VoDSL), and voice over multi-service broadband networks (VoMBN), generating a tone corresponding to a selected mode, and transmitting the tone to the Subscriber Line Interface Circuit/Subscriber Line Audio processing Circuit through the multiplexer, and a relay switch for maintaining an on state so that the user can use a general phone, and receiving an off signal from the processor and interrupting a general phone line when the user has pressed a specific digit for digital network services. The voice digital signal processor and the asymmetric digital subscriber line digital signal processor perform a voice processing procedure for satisfying the voice over Internet protocol, voice over digital subscriber line, and voice over multi-service broadband networks standards. The composite voice service terminal apparatus enables the user to compare and selectively use the composite voice services by call charges and quality. As a result, the user can easily make a phone call and use all the

22 services including general phone call services, voice over Internet protocol (VoIP) services, voice
23 over digital subscriber line (VoDSL) services, and voice over multi-service broadband networks
24 (VoMBN) services, with one terminal at a lower price.